



About ESMD

Mission statement

The Exploration Systems Mission Directorate (ESMD) is responsible for developing new capabilities and supporting technologies that enable sustained and affordable human and lunar robotic exploration.

Goals

- Explore the solar system and beyond
- •Extend human presence across the solar system, starting with a human return to the moon by the year 2020, in preparation for human exploration of Mars and other destinations
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- •Develop the innovative technologies, knowledge, and infrastructures both to explore and to support decisions about future destinations for human exploration
- •Promote international and commercial exploration participation to further U.S. scientific, security, and economic interests

Objectives

- Near term -Demonstrate Initial Operating Capability (IOC) of Constellation System by 2015
- •Far term –Human lunar return

Priorities

- Complete the Phase I Requirements and Definition Phases for Constellation Projects
 - Conduct Orion Project Preliminary Design Review (PDR) -2009
 - Launch Ares I-X 4th quarter FY09
 - Launch LRO-LCROSS in 3rd guarter FY09



Constellation Acquisition Update

	Company	Date awarded	Value
Orion	LOCKHEED MARTIN	August 2006	\$9 Billion
J2-X	Pratt & Whitney A United Technologies Company Pratt & Whitney Rocketdyne	July 2007	\$1.2 Billion
1st Stage	ATK	August 2007	\$1.8 Billion
Upper Stage	BOEING	August 2007	\$514.7 Million
Instrumental Avionics Unit	BUEING	December 2007	\$799.5 Million



Constellation and COTS: The Future Requirements Drivers!



Future Projects

- List projects that are on the horizon (will be working on) for the next two (2) years
 - Ares V (heavy lift launch vehicle) Phase 1 Contract Award: Spring 09
 - Altair (lunar lander) Interim Design Support Contract RFP Release: February 2009- Altair Phase 1 Contract Award: Summer 09
 - Pad 39B Emergency Egress Construction Contract: Fall 2009



Contact Us

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